<u>REMARKS</u>

This application has been reviewed in light of the Office Action dated March 17, 2004. Claims 1, 2, 4, 7, 8, 11, 13, 21, 22, 29 and 31-38 are presented for examination. Claims 1, 7, 11, 21 and 29 are in independent form, and have been amended to define still more clearly what Applicants regard as their invention. Favorable reconsideration is requested.

Claims 1, 2, 4, 7, 8, 11, 13, 21, 22, 29 and 31-38 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,460,030 (Ludtke).

As is discussed in the specification, the present invention relates to problems encountered as a result of the development of large, complex networks (examples may be enterprise-wide networks, or simply LANs, but in any event are not limited to any particular type of network). It is frequently the case that a user who wishes to use a function available on the network, for example, to have a document printed, will want to know which printer is closest to where the user is, or will need to ascertain which printers in the same building are capable of color printing, or the like. The present invention is intended to address these needs.

Independent Claim 1 is directed to a network system comprising a server, a client, and a device. The device may for example be a printer or a scanner or the like, but the nature of the device is not limited to any particular possibilities. The server comprises a first storage unit, to store hierarchical position information defining a position of a device in a plurality of hierarchical layers, and a first transmission unit, which transmits the hierarchical position information to the client via a network. The hierarchical position information may, by way of example only, be information of any type such as described above that is of use to a user,

such as, relative closeness of the device to the location of the user, capabilities of the device in comparison with those of other devices falling in a certain position or range within a hierarch of positions, or other information that can be expressed in terms of a hierarchy in position. The recited device comprises a second storage unit, to store icon data indicating an icon for the device, and a control unit, adapted to transmit the icon data to the client via the network. The client comprises a first reception unit, adapted to receive the hierarchical position information transmitted by the first transmission unit via the network, a second transmission unit, that transmits a request to a device corresponding to the hierarchical position information received by the first reception unit so as to acquire the icon data stored in the second storage unit from the device via the network, and a second reception unit, to receive the icon data transmitted by the control unit via the network. The client also comprises a display unit, to display, based on the hierarchical position information received by the first reception unit, the icon indicated by the icon data received by the second reception unit.

Among other important features of the system of Claim 1 is that the client receives the hierarchical position information from the server, and receives icon data for a device corresponding to the hierarchical position information from the device. It is also very important that the client displays an icon indicated by the received data, based on the received hierarchical position information.

Ludtke relates to techniques for searching through stored data that may be in any of several devices on a network, in the audio-visual control ("AV/C") protocol. Search criteria are defined at a controller device, and are contained in a command structure transmitted

- 11 -

from the controller device to a target device, which recognizes the command as such, and performs the search. If any data on that device match the criteria, those data are identified, and that identifier, together with a location identifier that indicates the location of the matching data, is sent back from the target device to the controller device. The identifier information in the response is sufficient for the controller device to access the matching data.. This is illustrated in fuller form in Figs. 3 and 4A - 5D of *Ludtke*. In the embodiment illustrated in Figs. 5A - 5D, a controller device 12 receives an identifier to access data from a proxy device 520, which serves as a proxy for a target device. The proxy device 520 analyzes the data content of the target device, and receives and processes the command structure from the controller device to perform the requested search. During this period, the network does not have to (and does not) carry traffic related to this search (col. 12, lines 30 and 31). The proxy device then sends the identifier information resulting from the search to the controller device, which can then use this information to access the actual data in the target device (col. 12, lines 32-40).

Applicants strongly point out that the identifier information used in *Ludtke* does not correspond to, or in any way even hint at, the recited "hierarchical position information" of Claim 1, and not does the selected data correspond to or hint at the recited "icon data" of Claim 1. As noted above, the first-quoted term used in Claim 1 is a broad one, but even so, nothing that has been found, or pointed out, in *Ludtke* could remotely be termed "hierarchical", at least not so far as Applicants can understand. The first passage in *Ludtke* cited by the Examiner in this regard, col. 12, lines 1-47, provides a description of the search performed using a proxy device, as discussed above. Nothing in that column, however, is seen to suggest

- 12 -

anything about the type of information stored about any devices on the network, except that the

controller device 12 must recognize that the proxy device is acting as a proxy for the intended

target device 220. It is not seen in what way this information is necessarily anything that could

be termed "hierarchical", much less "hierarchical position information", as is recited in Claim 1.

The remaining portion cited for this claim feature is col. 21, line 60, through

col. 22, line 47 (Claims 1-11 of *Ludtke*). Claim 1 reads, in its entirety:

> "1.   In a network of electronic devices having a target device containing
> stored data and a controller device, a method for performing a
> searchcomprising the steps of:
> a)   specifying a search criterion in a command structure;
> b)   transmitting said command structur from said controller device to said
> target device over a network interface, said target device recognizing a
> descriptor in said command structure as a request to perform a search of
> said stored data;
> c)   said target device performing said search of said stored data;
> d)   said target device identifying data on said target device that satisfies
> said search criterion and determining an identifier corresponding to said
> data that satisfies said search criterion; and
> e)   transmitting a response containing said identifier from said target
> device to said controller device over said network interface."

Claims 2-11 are each dependent directly or indirectly from Claim 1, and contain additional

recitations, as follows: Claim 2 recites that the controller device accesses the data using the

identifier, and that that data is transferred to the controller device from the target device over the

network interface (which is recited as supporting peer-to-peer communication). Claim 3 recites

that an object of media is transferred from the target device to the controller device over the

network interface. Claim 4 recites that the command structure comprises a code indicating data

to search for, a location of the data to search for, a start point within that location, and a response

format. Claim 5 further recites that the response format comprises an addresses for any data found that satisfies the search criterion. Claim 6 recites that the response format includes a position of an object of media that satisfies the criterion, Claim 7 recites that the response format includes an identifier of such object, Claim 8 recites that the response format includes a list containing such object, and Claim 9 recites that the response format comprises a type of list containing such object. Claim 10 recites that the electronic devices are compliant with the AV/C protocol, and Claim 11 recites that the target device comprises a prosy device.

Applicants can see nothing in any of those claims that could remotely be deemed to teach or suggest any "hierarchical position information", and frankly do not understand why those portions were cited.

Similarly, a careful review of *Ludtke* for the asserted teaching of icon data has not revealed anything that in Applicants' understanding would teach or suggest the recited icon data.

In both these respects, therefore, Claim 1 is believed to be clearly allowable over *Ludtke*.

Independent Claim 7 is directed to an information processor for communicating with another information processor and a device via a network. The processor of Claim 7 comprises a first reception unit, adapted to receive from the other information processor, via the network, hierarchical position information defining a position of a device in a plurality of hierarchical layers. A transmission unit is provided, that is adapted to transmit a request to a device corresponding to the hierarchical position information received by the first reception unit

so as to acquire icon data from the device, the icon data indicating an icon for the device. A second reception unit receives the icon data from the device via the network. A control unit displays, based on the hierarchical position information received by the first reception unit, the icon indicated by the icon data received by the second reception unit based on the received hierarchical position information.

Among other important features of the system of Claim 7 is that the client receives the hierarchical position information from the server, and receives icon data for a device corresponding to the hierarchical position information from the other information processor. It is also very important that the client displays an icon indicated by the received data, based on the received hierarchical position information.

It will be apparent that the foregoing remarks addressing the allowability of Claim 1 over *Ludtke* apply to Claim 7, as well.

Independent Claim 11 is directed to a device for processing a job requested via a network. The device of Claim 11 comprises a first storage unit, adapted to store hierarchical position information indicating a position of the device in a plurality of hierarchical layers, and a second storage unit, adapted to store a plurality of icon data indicating an icon for the device. Also provided are a judgment unit, adapted to judge a status of the device, a selection unit that selects icon data from among the plurality of icon data stored in the second storage unit in accordance with the status judged by the judgment unit, and a control unit, adapted to transmit the icon data selected by the selection unit via the network.

Among other important features recited in Claim 11 is that the device stores a plurality of icon data indicating an icon for the device, selects one of the plurality of icon data in accordance with the status of the device, and transmits the selected icon data to the network.

Applicants note further, with regard to *Ludtke*, that the identifier to access data in that patent does not correspond to a device icon. The *Ludtke* system is not designed such that the identifier is selected in accordance with the status of the proxy device 520 or of the target device 220. Rather, the identifier is determined and transmitted in accordance with a search criterion. applicants fail to see how *Ludtke* could teach or suggest the structure recited in Claim 11.

Independent Claims 21 and 29 are, respectively, a claim directed to a method of using a device like that of Claim 11, and a corresponding memory-medium claim, and both are believed to be clearly allowable at least by virtue of the arguments presented above in connection with Claim 11.

A review of the other art of record (including U.S. Patent 6,237,049 (Ludtke), which is apparently intended to form part of the disclosure of *Ludtke* but which was neither itself made of record by the Examiner nor provided to Applicants), has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other rejected claims in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable for at least the

same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and, therefore, its entry is believed proper under 37 C.F.R. § 1.116. Accordingly, entry of this Amendment, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicants' undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

Attorney for Applicants
Leonard P. Diana
Registration No. 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200